

K06721

AUG 25 2006

**510(k) Summary for the  
Dimension Vista™ System Drug 2 Calibrator  
(DRUG 2 CAL – KC420)**

**A. 510(k) Number:**

**B. Analytes:** Acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), and vancomycin (VANC).

**C. Type of Test:** Calibrator Material

**D. Applicant:** Dade Behring Inc., P.O. Box 6101, Newark, DE 19714-6101  
Victor M. Carrio, Regulatory Affairs and Compliance Manager  
Office: (302) 631-0376 Fax: (302) 631-6299

**E. Proprietary and Established Names:**

Dimension Vista™ System Drug 2 Calibrator  
(DRUG 2 CAL – KC420)

**F. Regulatory Information:**

1. Regulation section: 21 CFR § 862.3200 – Clinical Toxicology Calibrator
2. Classification: Class II
3. Product Code: DKB – Calibrator, Drug Mixture
4. Panel: Toxicology

**G. Intended Use:** The DRUG 2 CAL is an *in vitro* diagnostic product for the calibration of acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), and vancomycin (VANC) methods on the Dimension Vista™ System.

**H. Device Description:**

DRUG 2 CAL is a multi-analyte, liquid, bovine serum based product containing acetaminophen, carbamazepine, digitoxin, gentamicin, lidocaine, N-acetylprocainamide, procainamide, tobramycin, valproic acid, and vancomycin.

The kit consists of six vials, three vials of Calibrator A, and three vials of Calibrator B which are ready for use (no preparation is required). The volume per vial is 2.5 mL. Intermediate levels are automatically prepared and corresponding values calculated by the Dimension Vista™ System.

#### I. Substantial Equivalence Information:

Item	New Device	Predicate Device
	Dimension Vista™ System Drug 2 Calibrator	Dimension® Drug Calibrator II K033809
Intended Use	The DRUG 2 CAL is an <i>in vitro</i> diagnostic product for the calibration of acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), and vancomycin (VANC) methods on the Dimension Vista™ System.	Drug Calibrator II is an <i>in vitro</i> diagnostic product intended for the calibration of the following methods packaged in Flex® reagent cartridges: acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), vancomycin (VANC).
Analytes	Acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), and vancomycin (VANC).	Acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), and vancomycin (VANC).
Form	Liquid.	Liquid.
Traceability	USP <sup>1</sup> for all analytes except NAPA. NAPA - Alltech-Applied Sciences Reference Standards.	USP <sup>1</sup> for all analytes except NAPA. NAPA - Alltech-Applied Sciences Reference Standards.
Matrix	Bovine serum based.	Bovine serum based.
Number of Levels	Two levels <sup>2</sup> .	Five levels.

<sup>1</sup> United States Pharmacopeia.

<sup>2</sup> Intermediate levels are automatically prepared and corresponding values calculated by the Dimension Vista™ System.

#### J. Standard/Guidance Document Referenced:

- Guidance: Guidance for Industry - Abbreviated 510(k) Submissions for In Vitro Diagnostic Calibrators; Final, 02/22/1999  
Guidance for Industry and FDA Staff - Use of Symbols on Labels and in Labeling of In Vitro Diagnostic Devices Intended for Professional Use, 11/30/2004
- Standards: CEN 13640 Stability testing of In-Vitro Diagnostic Devices  
ISO 14971:2000 Medical devices -Application of risk management to medical devices

## K. Performance Characteristics:

1. Stability: Target shelf life for the Dimension Vista™ System Drug 2 Calibrator is 12 months. Calibrator shelf life is determined by comparing results of the product stored at 4°C with control stored at -20°C. The method is calibrated from this stored material. The 4°C material values are recovered versus the calibration. Recovery versus time is monitored and percent change over time is determined. Percent change should be less than or equal to 5%. Shelf-life stability (expiration) dating assignment at commercialization reflects the real-time data on file at Dade Behring, Inc.  
A vial punctured by the instrument and stored on board is stable for 24 hours.  
An open vial not on instrument, but recapped and stored in a refrigerator is stable for 31 days.

For testing, vials are opened /punctured on day zero. A quantity sufficient for multiple calibrations is removed and the vials are recapped and stored at 2 – 8 °C. Opened/punctured vials are tested on days 0, 1, 2, 8, and 32 versus freshly opened vials.

2. Traceability: The assigned values of the DRUG 2 CAL are traceable to United States Pharmacopeia Reference Materials except for NAPA, which is traceable to Alltech-Applied Sciences Reference Standards.
3. Bottle Value Assignment:

Acetaminophen, Carbamazepine, Digitoxin, Gentamicin, Lidocaine, N-acetylprocainamide, Procainamide, Tobramycin, Valproic Acid and Vancomycin Reference Material is weighed into bovine serum albumin at six levels and stored frozen. The verification of the Master Pool values are compared against previously approved Master Pool values. The approved Master Pool values were assigned with an instrument calibrated with the corresponding standard reference material. The stock solution is made by adding Acetaminophen, Carbamazepine, Digitoxin, Gentamicin, Lidocaine, N-acetylprocainamide, Procainamide, Tobramycin, Valproic Acid and Vancomycin Reference Materials gravimetrically to stock solution at target concentrations and verified on an instrument calibrated with a previously approved Master Pool. The commercial lot is made by adding calculated quantities of stock solution to bovine serum albumin in appropriate concentrations for each of the calibrator levels. The concentration

of each level is verified by using an instrument calibrated with Master Pools.

The final bottle values for each level of the commercial lot is assigned and verified using multiple instruments by testing  $N = 20$  replicates per level. A previously released commercial lot is used as a control.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Mr. Victor M. Carrio  
RA/QS Compliance Manager  
Dade Behring, Inc.  
P.O. Box 6101  
Mailstop 514  
Newark, DE, 19714-6101

AUG 25 2006

Re: k062121  
Trade/Device Name: Dimension Vista™ Drug 2 Calibrator (KC420)  
Regulation Number: 21 CFR 862.3200  
Regulation Name: Clinical Toxicology Calibrator  
Regulatory Class: Class II  
Product Code: DKB  
Dated: July 24, 2006  
Received: July 25, 2006

Dear Mr. Carrio:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

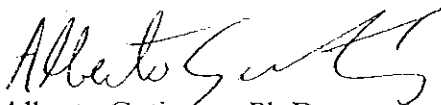
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

Page 2 –

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0484. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Alberto Gutierrez', with a stylized flourish at the end.

Alberto Gutierrez, Ph.D.

Director

Division of Chemistry and Toxicology

Office of In Vitro Diagnostic Device

Evaluation and Safety

Center for Devices and

Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K062121

Device Name:

Dimension Vista™ Drug 2 Calibrator (KC420)

Indications For Use:

The DRUG 2 CAL is an *in vitro* diagnostic product for the calibration of acetaminophen (ACTM), carbamazepine (CRBM), digitoxin (DGTX), gentamicin (GENT), lidocaine (LIDO), N-acetylprocainamide (NAPA), procainamide (PROC), tobramycin (TOBR), valproic acid (VALP), and vancomycin (VANC) methods on the Dimension Vista™ System.

Prescription Use   X  

AND/OR

Over-The-Counter Use


(Part 21 CFR 801 Subpart D)

(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

---

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

  
Division Sign-Off

Office of In Vitro Diagnostic Device  
Evaluation and Safety

Logo K062121